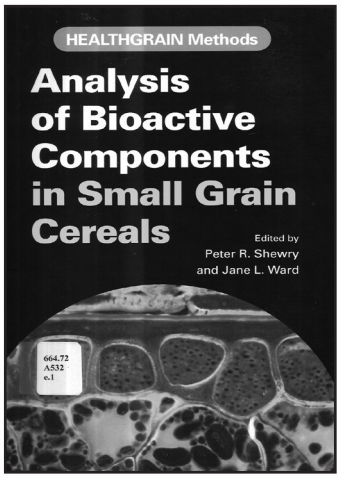
traditional breeding, innovative genetic variation, machinery and supplies, agricultural practices, besides weed and pest control to meet the increasing demand for high-quality end products. This book is designed for students, scientists and practitioners from agronomic and related areas of crop science, offering readers rich, comprehensive and current literature, not only on the development and quality of wheat, but covering diverse aspects of research. Specifically, plant physiology and pathology, entomology, genetics, development of new cultivars, taxonomy, chemistry and biochemistry of cereals, food processing and agribusiness are all focused. This publication, edited by Brett F. Craver, has drawn an impressive list of internationally respected authors, each providing cutting-edge chapters covering all these major topics of recent research. The first section of this publication, comprising three chapters, is designed to explain the process of wheat domestication and genetic evolution of the wheat plant. The second section, which covers 9 chapters, deals with strategies of management, control of diseases from different origins, and also improved performance of wheat cultures; the third section spans six chapters and describes the development of new cultivars based on traditional breeding procedures along with the use of molecular markers to select lines coupled to phenotypic data. Additionally, individual genetic mapping, comparative genomics and the development of transgenic application to achieve modified and improved wheat, are also covered in this section. Finally, the fourth and final section comprises five chapters and provides information regarding wheat classification systems, the use of biochemical and molecular markers to evaluate grain quality, the presence of phytochemicals, new applications and modified wheat, and also examines the American wheat marketing system and price regulation. Therefore, this publication is an invaluable resource of information and an excellent reference book for those interested in the production chain of wheat.

Profa. Úrsula M. Lanfer Marques
Faculty of Pharmaceutical Sciences/USP

FOOD ANALYSIS

SHEWRY, P. R.; WARD, J. L. *Analysis of bioactive components in small grain cereals.* St. Paul: Helathgrain methods, 2009. 290 p.



This book is part of the Framework Programme 6 HEALTHGRAIN Project (www.healthgrain.org/pub/), funded by the European Union, which aims to investigate the role of consumption of whole grains in reducing the risk of chronic non-communicable diseases with special focus on those related to metabolic syndrome. The book presents and discusses the analytical methods for the determination of micronutrients and bioactive compounds in cereals. The introductory chapter highlights the importance of cereals in the diet and of the identification of components related to their biological effects, and points out the challenges and opportunities for study on this subject. The book has 20 chapters, each of which specifically addresses the analytical methodology for the determination of a nutrient or a compound present in these cereals. The chapters present an introduction, the principle of the method in question plus details of procedures, concluding with examples of its application. Some specific comments allow the reader or the analyst to easily identify the critical points of the "analytical procedures" (for example in Chapter 10 - Quantitative analysis of oat avenanthramides). In summary, the book is rich in current methods for the analysis of micronutrients and bioactive compounds in whole grains, which can enhance the studies of young researchers working in the field of food chemistry.

Profa. Célia Colli e Alexandre Rodrigues Lobo
Faculty of Pharmaceutical Sciences/USP

FOOD AND NUTRITION

CHO, S.S.; SAMUEL, P. (Eds). *Fiber ingredients*: food application and health benefits. Boca Raton: CRC Press, 2009. 499 p.

The book describes a review of several kinds of dietary fiber available in the market, which can be used as ingredients. Eighteen kinds of fiber are examined, distributed in four sections according to profile: I Soluble fibers; II Resistant starch; III Conventional fibers; IV New products. Each chapter includes chemical characteristics, technological and functional properties and beneficial effects of the ingredient. Also, health claims for both ingredients